

REMARKS

Claims 1-22 are pending in the above-referenced patent application. Claims 4, 5, 14 and 15 are withdrawn from consideration as being directed to nonelected species. Claim 1 has been amended. No new matter has been added. The applicant respectfully requests consideration of these claims on the merits.

1. Objections to the Drawings

The drawings were objected to as being of insufficient quality to permit examination. Replacement drawings are being submitted with this Amendment. The applicant respectfully requests that the objections be withdrawn.

2. Information Disclosure Statements

The Examiner declined to consider a number of references identified in the Information Disclosure Statements filed on July 5, 2002, and January 31, 2005, because of the lack of a publication date. A new Information Disclosure Statement is being submitted with this Amendment, in which download dates are provided for a number references that were downloaded from the internet. As for the remaining references for which no date is provided, the applicant admits that these references are prior art for the purpose of prosecuting this application and respectfully requests that the references be considered.

3. Rejections under Section 101

Claims 1-11 and 21 were rejected under 35 U.S.C. § 101 as allegedly being directed to non-statutory subject matter. Specifically, the Examiner states that the claims, as a whole, do not produce a result that is concrete, tangible, and useful. The applicant respectfully requests reconsideration in light of the amendment to claim 1.

Claim 1 is directed to a computer-implemented method for generating a library design for a set of experiments. The claimed method includes the steps of defining a library array that represents an arrangement of experiments; defining a plurality of sources that represent materials or conditions that can be used in the set of experiments; receiving user input that defines a

plurality of maps that represent the application of sources to elements of the library array and that are ordered to define a mapping sequence; and generating a library design that includes electronic data representing the library array, the sources, the maps and the mapping sequence, where the library design specifies amounts of one or more sources to be applied to each of a plurality of the library elements and the amounts are defined at least in part by the order of maps in the mapping sequence. The claim has been amended to specify that the library design is used to perform the set of experiments.

As explained in the present specification, experiments are performed on libraries of materials, and involve the application of chemical entities (“materials”) and process conditions to individual library members. *See* Specification, page 8, lines 1-9; page 10, lines 7-10. Thus, the claims now expressly recite the transformation of an article or physical object to a different state or thing – i.e., the physical transformation of a materials library by the application of chemical entities and/or process conditions. The applicant therefore submits that claim 1, and dependent claims 2-11 and 21, which are based on claim 1, clearly do produce a result that is concrete, tangible, and useful, as required under 35 U.S.C. § 101. The rejections under Section 101 should be withdrawn.

4. Rejections under Section 102

Claims 1-3, 6-13, and 16-22 were rejected under 35 U.S.C. § 102 as allegedly being anticipated by WO 00/23921 (“Lacy”). The applicant respectfully disagrees.

The applicant agrees that Lacy discloses computer-implemented methods and computer program products for generating library designs that include sources representing components to be used in preparing a library and map that define distribution patterns for assigning those components to library elements. However, as noted above, claim 1 of the present application expressly recites that the amounts of sources to be applied to the library elements as specified in the generated library design are “defined at least in part by the order of maps in the mapping sequence”. Thus, as explained for example at page 13, lines 2 through 5, of the present specification, “maps can define source amounts as a function of values defined by previous maps in the mapping sequence. That is, a given map can take as inputs one or more source amounts defined by previous maps, and define source amounts as a function of those inputs.”

Independent claim 11 includes a similar requirement.

The applicant submits that Lacy does not disclose this limitation of the present claims. Accordingly, Lacy cannot anticipate independent claims 1 or 11, or dependent claims 2-10 and 12-22. The applicant therefore respectfully requests that the rejections under Section 102 be withdrawn.

5. Conclusion

The applicant submits that each of the pending claims 1-22 are now in condition for allowance. This Amendment is being filed with a petition for a three month extension of time (per the Examiner's specification of a two month period for submission of replacement drawings). Please apply any charges or credits in connection with this application, throughout the pendency thereof, to Deposit Account No. 50-0496.

Date: 1/16/07

Symyx Technologies, Inc.
3100 Central Expressway
Santa Clara, California 95051
Tel.: (408) 720-2523
Fax: (408) 773-4029

Respectfully submitted,



Timothy A. Porter
Reg. No. 41,258
Attorney for Applicant